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A new approach for development of rheological relations for saturated porous media

Khramchenkov E., Khramchenkov M.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. Equations of hydro-geo-mechanics in filtrating porous media with porous variable- mass skeleton are examined. Variation of skeleton mass occurs due to heterogeneous chemical reactions. Regularities of mass transfer and deformations in such kinds of media are analyzed. Peculiarities of obtaining of rheological relations are investigated. A new approach to obtain rheological relations is proposed. Numerical simulations in order to verify obtained model are performed.

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